400-Acre Wood

Project Learning Tree Activity #50

Program of Studies

Science:

- S-5-SI-1 (Identify questions that can be answered through scientific investigations combined with scientific information.)
- S-5-SI-2 (Use appropriate equipment (e.g., watches), tools (e.g., rain gauges), techniques (e.g., classifying), technology (e.g., calculators), and mathematics in scientific investigations.)
- S-5-SI-3 (Use evidence (e.g., classifications), logic, and scientific knowledge to develop scientific explanations.)
- S-5-SI-4 (Design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-5-SI-5 (Communicate (e.g., draw, speak) designs, procedures, and results of scientific investigations.)
- S-5-SI-6 (Review and analyze scientific investigations and explanations of other students.)
- S-5-AC-2 (Students will demonstrate the role science plays in everyday life and explore different careers in science.)
- S-8-SI-1 (Identify and refine questions that can be answered through scientific investigations combined with scientific information.)
- S-8-SI-2 (Use appropriate equipment (e.g., barometers), tools (e.g., meter sticks), techniques (e.g., computer skills), technology (e.g., computers), and mathematics in scientific investigations.)
- S-8-SI-3 (Use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- S-8-SI-4 (Design and conduct different kinds of scientific investigations to answer different kinds of questions.)
- S-8-SI-5 (Communicate (e.g., write, graph) designs, procedures, and results of scientific investigations.)
- S-8-SI-6 (Students will review and analyze scientific investigations and explanations of other students.)
- S-8-AC-7 (Students will demonstrate the role science plays in everyday life and explore different careers in science.)

Social Studies:

- SS-P-E-2 (Students will recognize fundamental economic concepts (e.g., goods and services, supply and demand, scarcity, and opportunity cost).)
- SS-P-E-5 (Students will recognize skills used in the decision-making process in order to make informed economic decisions.)
- SS-4-G-4 (Students will understand how humans have interacted with the physical environment to meet their needs in Kentucky and regions in the United States.)

- SS-4-E-1(Students will understand the basic economic problem of scarcity (imbalance between unlimited wants and limited resources) and recognize how people have addressed the problem through decision making.)
- SS-4-E-2 (Students will understand that producers create goods and services and consumers make economic decisions and choices.)
- SS-5-E-1(Students will recognize the impact of economic factors (e.g., security, growth, desire for profits) on decisions made by individuals, businesses, and governments in the United States.)
- SS-6-G-3 (Students will evaluate the impact of human settlement and the interaction of humans with their environments.)
- SS-6-E-3 (Students will recognize that all regions must address the questions of production, distribution, and consumption and recognize how their resources are used to produce goods and services.)

Math:

- M-4-NC-3 (Students will understand the relative magnitude of whole numbers to 1,000,000.)
- M-7-A-3 (Students will understand the concept of equations and inequalities using variables as they relate to everyday situations.)

Core Content

Science:

- SC-M-SI-1 (Refine and refocus questions that can be answered through scientific investigation combined with scientific information.)
- SC-M-SI-2 (Use appropriate equipment, tools, techniques, technology, and mathematics to gather, analyze, and interpret scientific data.)
- SC-M-SI-3 (Use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- SC-M-SI-4 (Design and conduct scientific investigations.)
- SC-M-SI-5 (Communicate (e.g., write, graph) designs, procedures, observations, and results of scientific investigations.)
- SC-M-SI-6 (Review and analyze scientific investigations and explanations of other students.)
- SC-M-AC-3 (Demonstrate the role science plays in everyday life: past, present, and future. Science is a human endeavor. Men and women of various social and ethnic backgrounds engage in activities of science (to include careers in science). Scientists formulate and test their explanations of nature using observations, experiments, and theoretical and mathematical models. It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists.)
- SC-H-SI-2 (Use equipment, tools, techniques, technology, and mathematics to improve scientific investigations and communications.)
- SC-H-SI-3 (Use evidence, logic, and scientific knowledge to develop and revise scientific explanations and models.)
- SC-H-SI-4 (Design and conduct different kinds of scientific investigations.)
- SC-H-SI-5 (Communicate and defend the designs, procedures, observations, and results of scientific investigations.)
- SC-H-SI-6 (Review and analyze scientific investigations and explanations of other investigators, including peers.)
- SC-H-AC-2 (Explore the impact of scientific knowledge and discoveries on personal and community health; recognize how science influences human population growth, use science to analyze the use of natural resources by an increasing human population; investigate how science can be used to solve environmental quality problems, use science to investigate natural and human-induced hazards; and analyze how science and technology are necessary but not sufficient for solving local, national, and global issues.)
- AC-H-3.5.3 (Organisms both cooperate and compete in ecosystems. Often changes in one component of an ecosystem will have effects on the entire system that are difficult to predict. The interrelationships and interdependencies of these organisms may generate ecosystems that are stable for hundreds or thousands of years.)
- SC-H-3.5.5 (Human beings live within the world's ecosystems. Human activities can deliberately or inadvertently alter the dynamics in ecosystems. These activities can threaten current and future global stability and, if not addressed, ecosystems can be irreversibly affected.)

Social Studies:

- SS-E-3.1.1 (Scarcity requires people to make choices about using goods, services, and limited resources.)
- SS-E-3.1.3 (Every time a choice is made, an opportunity cost is incurred. Opportunity cost refers to what is given up when an economic choice is made.)
- SS-E-3.2.3 (The U.S. economic system is based on free enterprise where businesses seek to make profits by producing or selling goods or services.)
- SS-E-3.4.3 (Producers who specialize create specific goods or services (e.g., computer games, tennis shoes, movie theatres).)
- SS-E-4.4.4 (People may have different perspectives concerning the use of land (e.g., building developments, cutting down rain forest for farming).)
- SS-M-3.1.1 (Productive resources (land, labor, capital) are limited and do not satisfy all the wants of individuals, societies, and governments (scarcity).)
- SS-M-3.4.1 (The basic economic issues addressed by producers are production, distribution, and consumption of goods and services.)
- SS-M-4.4.3 (The natural resources of a place or region impact its political, social, and economic development.)
- SS-M-4.4.4 (Individual perspectives impact the use of natural resources (e.g., watering lawns, planting gardens, recycling paper).)

Math:

- MA-E-1.2.2 (Add, subtract, multiply, and divide whole numbers using a variety of methods (e.g., mental, paper and pencil, calculator).)
- MA-E-3.2.2 (Collect, organize, and describe data (e.g., drawings, tables, charts).)
- MA-M-1.2.1(Add, subtract, multiply, and divide rational numbers (fractions, decimals, percents, integers) to solve problems.)
- MA-M-4.3.1(How everyday situations, tables, graphs, patterns, verbal rules, and equations relate to each other.)
- MA-M-4.3.2 (How the change in one variable affects the change in another variable (e.g., if rate remains constant, an increase in time results in an increase in distance).)

Practical Living:

- PL-M-4.1.3 (Jobs and career opportunities vary within and among communities and global regions based, in part, on available resources.)